# California Sportfishing Protection Alliance

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VIA: Electronic Submission
Hardcopy if Requested

Re: CSPA and CWIN Comments on Proposed Waste Discharge Requirements for Discharges From Irrigated Lands Within the Sacramento River Watershed

Dear Mark Cady,

Thank you for this opportunity to comment on the proposed waste discharge requirements for discharges from irrigated lands within the Sacramento River Watershed area (hereinafter the "Proposed WDRs"). These comments are submitted on behalf of California Sportfishing Protection Alliance ("CSPA") and California Water Impact Network ("C-WIN") (collectively "CSPA"). Once again, the Regional Board has proposed a water pollution control regimen that unrealistically relies on a convenient fiction that regional monitoring can provide a technically sound basis for curtailing and preventing widespread pollution discharges by some 12,000 farms discharging polluted irrigation water and storm water flows to the Sacramento River and a number of its tributaries. The data collected thus far only proves the folly of a control program that relies exclusively on not looking directly at the individual discharges causing the problem and hoping to "regulate" from a distance. As expert hydrogeologist Steven Bond comments, despite years of monitoring of regional sample sites by the Sacramento Valley Water Quality Coalition, the Coalition in its annual reports consistently conclude that beneficial uses are not being protected, that the water quality exceedances can be attributed to any number of causes or sources, but no such causes have ever been identified. As Mr. Bond concludes, the newly proposed WDRs will not do any better:

> Given that under the proposed Order the discharges from irrigated agriculture are never directly measured, the existing stations, always distant points downstream, will never definitively identify the sources of pollution or characterize upstream water quality. Under the existing program and the proposed Order, the sources of pollution and impairment will likely remain undefined, and a matter only for speculation. The identification of high quality waters will not be possible for the reasons stated above.

Comments of Steven Bond, p. 6 (Jan. 20, 2014) (attached). This is indisputable evidence that downstream monitoring stations cannot and do not measure water quality occurring miles upstream. It also is indisputable that downstream stations cannot determine water quality either in-stream or from individual discharges for the many miles of surface waters upstream of these locations.

Staff proposes that the Regional Board continue to water down this critical regulatory program based on the unreasonable fears of this large and relatively well-off community of chronic pollution dischargers because they don't want to air the dischargers' dirty laundry in public or in response to an unreasonable fear of being sued by third-parties. One cuts against the basic tenet of every other water quality control program managed by the Board and the other indicates a profound misunderstanding of the enforcement opportunities presented by the Water Code. Likewise, perhaps similar to every other regulated industry in the State, Regional Board staff hides behind a rhetoric of poverty or the dischargers' refrain that they are "price takers" and not "price makers." The simple fact is that the massive amounts of pollution impairing this portion of the Sacramento Valley watersheds are dumped into the State's waterways by a multi-billion dollar industry that has accrued substantial profits for the last decade even while bemoaning the modest costs of the current waiver program. Slightly more than 1,118 dischargers control 547,080 irrigated acres, or about 94 percent of the 582,000 acres of irrigated lands to be governed by the Proposed WDRs. These large farms on average are over 300 acres in size.

And, although one must extrapolate from county-wide data because of the lack of information gathered by staff, these large farms likely generate billions of dollars in net profits within the WDR area. Staff has failed to articulate any evidence demonstrating that farm-specific monitoring and more direct control over the west-side dischargers involve unreasonable costs. Nor does staff present the Board with sufficient evidence to make the findings necessary to authorize, as staff proposes, degradation of every surface and groundwater throughout the WDR area, signaling the Regional Board's wholesale retreat from carrying out its duty to protect surface and ground water quality when well-heeled farmers are the polluters.

CSPA requests that the Regional Board reject the Proposed WDRs and send the proposal back to staff to incorporate appropriate farm-specific discharge and receiving water monitoring, adequate groundwater monitoring, a commitment to preventing degradation of all high quality waters, and to make all reports and plans prepared pursuant to the WDRs available to the public and, in the case of key management plans, subjected to review and approval through the Regional Board's public, decision-making procedures.

**A. As Proposed, The Order Would Not Waive Filing of Reports of Waste Discharge By All Dischargers Within the WDR Area.**

If the intent is for the Regional Board to maintain the waiver of reports of waste discharge ("RWD"), the Regional Board must comply with Water Code Section 13269, including circulating a proposed waiver to the public for review and comment and making sure the Board has sufficient evidence to make the requisite findings. Although the Regional Board "may prescribe requirements although no discharge report has been filed[,]" that provision does not exempt any discharger from submitting the report of waste discharge mandated by Water Code § 13260. Water Code § 13263(d).

The requirement to file a report of waste discharge is comprehensive:

> (a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board: (1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.

Water Code § 13260(a)(1). The only exception to submitting a RWD for a person discharging waste is if the Regional Board issues a conditional waiver pursuant to Water Code § 13269:

> (b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

Water Code § 13260(b). Staff's information sheet appears to assume that by issuing general WDRs, the dischargers within the covered area need not file the RWD required by Section 13260. Water Code § 13263(d) provides no such exemption. Indeed, by its plain terms, it merely emphasizes that the RWD requirement applicable to each discharger is separate and distinct from the WDR requirement applicable to the Regional Board. The distinctness of the two provisions is demonstrated by the waste discharge prohibitions set forth in Water Code § 13264. Section 13264 provides that:

> (a) No person shall initiate any new discharge of waste or make any material changes in any discharge, or initiate a discharge to, make any material changes in a discharge to, or construct, an injection well, prior to the filing of the report required by Section 13260 and no person shall take any of these actions after filing the report but before whichever of the following occurs first:
> (1) The issuance of waste discharge requirements pursuant to Section 13263.
> (2) The expiration of 140 days after compliance with Section 13260 if the waste to be discharged does not create or threaten to create a condition of

> pollution or nuisance and any of the following applies: [describing various CEQA scenarios and associated timelines…]
> (3) The issuance of a waiver pursuant to Section 13269.

Water Code § 13264(a). Thus, it is clear that filing a RWD is a separate and distinct duty from the Board's issuance of WDRs. Indeed, the discharge prohibition is complete prior to the filing of an RWD even where a WDR is issued. Second, the only way to avoid the discharge prohibitions ***after the filing of a RWD*** is the issuance of WDRs or a waiver. Given this requirement, WDRs cannot be read to exempt RWDs.

The only exemption to the RWD requirement is the issuance of a waiver pursuant to Water Code § 13269. Because the current action items do not propose to issue a waiver of the Section 13260 RWDs for any of the irritated lands dischargers in the WDR Area, every discharger will still have to file an RWD, including the monitoring and other information already required by the Regional Board. CSPA believes that RWDs would go a long way toward curing the farm-specific data gap that the WDRs propose to maintain.

## B. The Regional Board Has No Authority To Deputize Third-Parties To Hold Section 13267 Reports For The Regional Board And Insulate The Reports From Public Disclosure.

Despite the availability of electronic reporting and other efficient methods of handling large numbers of reports and data, Board staff once again propose that irrigated lands dischargers to be allowed to keep their management practices to themselves and the third-party coalition, rather than the Regional Board and the rest of the interested public. Proposed WDRs, p. 25.

The Farm Evaluation Reports ("FERs") are one of the reports proposed by the WDRs pursuant to Section 13267 authority. *Id*., p. 9. Water Code § 13267 does not authorize the Regional Board to order reports to be submitted to any entity other than the Board. Nor is there any authority in the Water Code authorizing the Regional Board to designate third parties to manage 13267 reports on behalf of the Regional Board. Section 13267 authorizes the Regional Board to require that dischargers "***shall furnish***, under penalty of perjury, technical or monitoring program reports which the regional board requires." Water Code § 13267(b)(1) (emphasis added). "In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person ***to provide the reports***." *Id*., § 13267(b)(1) (emphasis added). Lastly, Section 13267 expressly preserves dischargers' trade secrets when providing the reports to the Regional Board, emphasizing however, that "these portions of a report shall be available for use by the state or any state agency in judicial review or enforcement proceedings involving the person ***furnishing the report***." *Id*., § 13267(b)(2) (emphasis added).

Nothing in Section 13267's provisions suggests or implies that the Regional Board can order a discharger to provide a report to a third-party, either for safe-keeping or any other reason. It is untenable that "furnishing" or providing a report under 13267 is intended to be to any other entity but a regional board. Perhaps most obviously, the language regarding trade secrets would hardly be relevant if Section 13267 anticipated that the authorized reports would be furnished to a private entity rather than a public agency, *i.e.* the relevant regional board. More importantly, by deputizing third-parties to retain 13267 reports like the FERs, the Regional Board frustrates Section 13267's plain intent to have the reports, even their trade secrets, available to the state or any state agency for enforcement. For these reasons, the FERs and other plans and reports earmarked for storage at the third-party coalition's office must be provided directly to the Regional Board and, with the exception of legitimate trade secrets, be accessible to the public.

## C. If the Regional Board Makes the Findings Under the High Quality Waters Policy to Allow Degradation in Both Surface and Ground Waters Throughout The 1,770,000 Acre WDR Area, the Regional Board Will Have Abused Its Discretion and Proceeded in a Manner Inconsistent With the Law.

Staff asks the Board to take the unprecedented action of authorizing degradation of an entire area of the Central Valley spanning several watersheds based on little more than a hope that 12,000 dischargers, about 4,320 of which consist of very large, generally very profitable farms spanning 96% of irrigated acres, will effectively volunteer to do the right things to protect water quality. And that proposal is based on evidence that is yet to be collected and, in the case of discharge data or meaningful receiving water data, may never be collected.

The Regional Board's decisions must be based on the weight of the evidence. That means, the Regional Board must gather in a preponderance of evidence in order to support its decisions implementing the High Quality Waters Policy. Staff proposes that the Water Board turn this standard on its head by suggesting that the Board should make a determination to allow every high quality water in the Sacramento Watershed area to be degraded without any evidence at all.

Staff tries to convince itself that a pollution discharge from an irrigated field is unique to the world of pollution regulation. It is not. Staff surmises, "Very little guidance has been provided in state or federal law with respect to applying the antidegradation policy to a program or general permit where multiple water bodies are affected by various discharges, some of which may be high quality waters and some of which may, by contrast, have constituents at levels that already exceed water quality objectives." Information Sheet, p. 48. Every waterbody in the state is affected by multiple dischargers. And, despite staff's effort to contrive complexity where none exists, no one discharger is emitting pollutants from any particular field to multiple waterbodies. Whether staff likes it or not, the high quality water policy, indeed the entire Porter-Cologne Act, applies to each discharge. Just

because there are numerous discharges releasing large quantities of pollution to waterways, does not mean the high quality waters policy is complicated for any single discharger.

State Board Resolution No. 68-16 provides:

> Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.

The findings necessary to allow degradation under the Policy are stringent:

> When the state's antidegradation policy is triggered, as here, Resolution No. 68-16 provides that the Regional Board is authorized to allow the discharge of waste into high quality waters only if it makes specified findings. The State Board has described these findings as a two-step process. "The first step is if a discharge will degrade high quality water, the discharge may be allowed if any change in water quality (1) will be consistent with maximum benefit to the people of the State, (2) will not unreasonably affect present and anticipated beneficial use of such water, and (3) will not result in water quality less than that prescribed in state policies (e.g. water quality objectives in Water Quality Control Plans). The second step is that any activities that result in discharges to such high quality waters are required to use the best practicable treatment or control of the discharge necessary to avoid a pollution or nuisance and to maintain the highest water quality consistent with the maximum benefit to the people of the State."

*Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Bd.* (2012) 210 Cal.App.4th 1255, 1278-1279, citing (State Bd., Guidance Mem. (Feb. 16, 1995) p. 2.).

Applying the Policy for any given discharge requires that (1) data going back to 1968 from the receiving water be reviewed to determine whether it is a high quality water for the pollutants likely to be discharged; (2) data regarding the levels, presumably concentration levels that can be compared to the best receiving water concentrations, of pollutants being discharged by the farm; (3) identification for that farm of the levels of control, treatment, or management practices which would comply with the high quality water levels; (4) identification for that farm of the levels of control, treatment, or management practices which would comply with the applicable water quality standards for those pollutants; (5) the relative cost difference, if any, between those actions, and (6) a determination whether the cost of maintaining the high quality water level is so

disproportionate to the mandatory cost of achieving standards that the discharger should be allowed to degrade the receiving water down to, but not lower than, the applicable standards because that would be consistent with the "maximum benefit to the people of the State." This outline is how the Policy has been applied for four decades to individual dischargers. The Policy does not provide an exception to a category of dischargers simply because there are thousands of them. If anything, that fact warrants much more allegiance by the Regional Board to the Policy's requirements, not, as staff is proposing, a dilution of those requirements to a meaningless self-fulfilling prophecy – we hope the dischargers will do the right thing, hence there won't be degradation or, if there is, giving that particular discharge a break assumes a maximized benefit to the people of the State will result.

The only legal way to apply these mandatory criteria to farm dischargers in the WDR area is to require each farmer to submit a detailed farm evaluation report which contains sufficient monitoring of the farm's discharges, representative monitoring of their local receiving water quality, and details about their existing and proposed discharge pollution controls and management practices, and the costs of such controls. If either existing data already in the Board's database or the submitted receiving water data establish water quality higher than standards for any pollutant being discharged, the Board would then be in a position to decide whether the measures in place or being proposed will protect the highest quality of water in the farm's receiving waters and, if not, whether the costs to that particular farmer of maintaining that highest water quality are not to the maximum benefit of the people of the State.

### 1. The Regional Board Cannot Allow Degradation Under the High Quality Waters Policy Prior to Identifying the High Priority Waters in the WDRs' Geographic Area

In order to make a rationale decision to allow degradation of a high quality water, the Regional Board must first identify which of the waters within the WDR area are high quality waters. Neither the Board nor its staff have reviewed the available irrigated lands program data and determined which of the waterbodies within the watershed are high quality waters, *i.e.*, what is the highest water quality that has been achieved in any given stretch of water since 1968. Nor did they seek monitoring data from other agencies, like the U.S. Geological Survey, U.S. Fish and Wildlife Service or U.S. Bureau of Reclamation that, over many years, have been collecting water quality data in the subject area. This is despite staff's acknowledgement that plenty of data exists – much of which would identify that perhaps every waterbody within the Watershed is high quality waters. *Asociacion de Gente Unida por el Agua v. Central Valley Regional Water Quality Control Bd.* (2012) 210 Cal.App.4th 1255, 1271 (although data more recent than 1968 may not demonstrate a water body is not high quality, such data can demonstrate a water body is high quality). But they do not know if that is the case because, despite years of presumably reviewing all of that data and claiming to have designed an effective water monitoring program in the watershed, for purposes of the WDRs and the High Quality water policy, staff makes no effort to review the data for the waterbodies at issue. Information Sheet, pp. 48-49. It is a

simple task, that could have been accomplished in the last three to four years, for a staff person to run a simple search of the data to determine the best water quality for every water segment in the watershed. Without knowing what level of water quality is necessary to protect high quality waters, it is an abuse of discretion for the Board to claim that it has considered the costs of achieving those concentrations by each of the relevant upstream dischargers, whether they can feasibly be achieved, and evaluated the cost to the public of not achieving them.

If staff claims it does not have the data for a particular waterbody or reach of a waterbody, then obviously the Board's past monitoring program and any proposed monitoring based on that effort are deficient and, thus, in violation of the Policy. This is particularly true for the vast stretches of waterbodies that lie upstream of the relatively few monitoring locations sampled by the Coalition or agencies over the years. If the Board cannot determine whether or not a water or a relevant stretch is high quality or not for lack of any data, than the Board is not in any position to make a finding that degradation in that waterbody is authorized consistent with the Policy. As CSPA's experts point out, this is the norm for most of the waters included in the WDR area. Bond Comments, Comments of Richard McHenry (Jan. 21, 2014). That means many miles of that creek drainage may or may not be high quality and may or may not be being degraded. That data gap is not evidence that the Board can even begin to apply the High Quality Waters Policy's criteria and make the prerequisite findings. In order to apply the Policy based on the weight of evidence, the Board must first gather some relevant evidence by requiring the discharger(s) it is considering authorizing to degrade water quality to gather in the necessary data – whether collected in the past or anew – to determine whether the water is high quality or not and what costs might be associated to both the discharger(s) and the public by allowing degradation their receiving waters.

The Court of Appeal has spelled out the necessity of comparing the actual pollutant-specific, baseline water quality of a particular waterbody as compared to the applicable water quality standard as the first step in applying the High Quality Waters Policy:

> When undertaking an antidegradation analysis, the Regional Board must compare the baseline water quality (the best quality that has existed since 1968) to the water quality objectives. If the baseline water quality is equal to or less than the objectives, the objectives set forth the water quality that must be maintained or achieved. In that case the antidegradation policy is not triggered. However, if the baseline water quality is better than the water quality objectives, the baseline water quality must be maintained in the absence of findings required by the antidegradation policy.

*Asociacion de Gente Unida por el Agua*, 210 Cal.App.4th at 1270. The Court of Appeal found that even a single water sample from the receiving water that is above the applicable standard was sufficient to establish that a waterbody is a high quality water. *Id*., 210 Cal.App.4th at 1271. Likewise, the Board has to identify which constituents qualify the

water as high quality in order to rationally apply the Policy. *Id*. ("Water can be considered high quality for purposes of the antidegradation policy if it is determined to be so for any one constituent, because the determination is made on a constituent by constituent basis"). *See* Information Sheet, p. 46 (Waters can be of high quality for some constituents or beneficial uses but not for others.")

Because the Board does not know which waters are high quality waters, the Board has no idea which farm or farms are discharging into those high quality waters. As a result, the Board has none of the requisite information necessary to apply the High Quality Waters Policy's balancing test. The Board does not know what the economic situation is for the discharging farmer or any affected users. The Board does not know what additional measures may be available to prevent the degradation staff is so willing to authorize. There is no information about what incremental cost might be required for any given farmer to achieve the highest quality water versus having to comply with standards. *See Asociacion de Gente Unida por el Agua*, 210 Cal.App.4th at 1270 ("The baseline quality of the receiving water determines the level of water quality protection"). Thus, there is no evidence – nevermind a preponderance – to establish that relieving that farmer or many farmers of that incremental cost somehow maximizes benefit to all Californians.

Staff's information sheet attempts to expand the data required to assess the presence of high quality waters or otherwise apply the Policy. The information sheet, Appendix A, states that:

> There is no comprehensive, waste constituent-specific information available for all surface waters and groundwater aquifers accepting irrigated agricultural wastes that would allow site-specific assessment of current conditions. Likewise, there are no comprehensive historic data.

Information Sheet, p 48. First, the Court of Appeal has rejected the need for "comprehensive" data or assessments to determine whether the Policy applies. 210 Cal.App.4th at 1270-71. There is plainly ample data to determine whether at least some water segments within the WDR area are high quality and whether they are already being degraded by numerous unidentified farm dischargers. Second, there is likely available monitoring data collected by other agencies over the years that could be evaluated if staff would only endeavor to collect it. Third, by conceding that staff does not have data, which is indeed true for many of the waterbody segments within the WDR area, that concession admits that the Board cannot support any finding that degradation by every discharger in those unmonitored areas of the WDR area is warranted.

### 2. Staff's Proposal Would Have the Regional Board Determine That Degradation is Authorized Even for Parameters and Waterbody Reaches That, Although High Quality, Discharges are Not Currently Degrading.

To the extent the farms covered by the proposed WDRs are not degrading waters at least for a few pollutants where monitoring stations are located, there is obviously no legitimate rationale for the Regional Board to authorize degradation.[1] Yet that is precisely what staff proposes the Board do. The WDRs propose a blanket authorization for farms in the WDR area to degrade waters even for pollutants at the monitoring locations that they cannot show any reason degradation is necessary for the public benefit or any other reason. Yet a review of the data, even for a few of the core monitoring locations, shows that, at least for a few pollutants at those locations, although the waters are high quality, there is no degradation observed at those locations. Where there is no discernable discharge degrading water or any information on a discharger's potential costs available to compare to the general public benefit, there is no evidence on which to base an approval of future discharges causing degradation. This type of advance authority to degrade for any pollutant is entirely inconsistent with the Policy.

### 3. The Regional Board Does Not Have Sufficient Evidence to Establish that Any Given Discharger's Degradation of Surface and Ground Waters Throughout the WDR Area Will Maximize Benefits to the People of California.

In order to authorize any degradation from high quality down to the applicable water quality objective, the Regional Board must be presented with evidence a discharge's degradation of high quality water will be consistent with maximum benefit to the people of California. "The first step is if a discharge will degrade high quality water, the discharge may be allowed if any change in water quality (1) will be consistent with maximum benefit to the people of the State. *Asociacion de Gente Unida por el Agua*, 210 Cal.App.4th at 1278. The State Board has provided guidance, endorsed by the Court of Appeal, which makes clear that evaluating maximum benefit must be done for a specific discharge, not based on Central Valley wide generalities:

> The State Board's guidance memorandum defines the term "maximum benefit to the people of the State" as follows: "Before ***a discharge*** to high quality water may be allowed, it must be demonstrated that any change in water quality 'will be consistent with the maximum benefit to the people of the state.' This determination is made on a ***case-by-case basis*** and is based on considerations of reasonableness under the circumstances ***at the site***.

*Id*. (emphasis added) (quoting State Board, Guidance Mem. (Feb. 16, 1995) pp. 4–5). The State Board guidance lays out factors, making clear that they must be considered for a specific discharge, not thousands of discharges at once:

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[1] Because the only data is at the downstream monitoring locations, the fact that no degradation for several pollutants is observed at those locations does not preclude extensive degradation from discharges well upstream.

> Factors to be considered include (1) past, present, and probable beneficial uses of the water (specified in Water Quality Control Plans); (2) economic and social costs, tangible and intangible, of ***the proposed discharge*** compared to the benefits, (3) environmental aspects of ***the proposed discharge***; and (4) the implementation of feasible alternative treatment or control methods. With reference to economic costs, both costs to ***the discharger*** and the affected public must be considered. 'Cost savings to ***the discharger***, standing alone, absent a demonstration of how these savings are necessary to accommodate "important social and economic development" are not adequate justification' for allowing degradation. See [State Board] Order No. WQ 86-17, at 22, n. 10.

*Id*. (emphasis added). The Information Sheet acknowledges this fundamental aspect of the High Quality Waters Policy – "Waters can be of high quality for some constituents or beneficial uses but not for others." Information Sheet p. 48. Despite that understanding, staff has not evaluated any particular farm, any specific waterbody, or any given discharge within the WDR area to determine what improvements are necessary to its management practices (assuming it has any such practices), the costs of such improvements, or that farm's discharges contribution to any degradation measured far downstream. Only close to a year after the Regional Board authorizes degradation, does staff propose any Farm Evaluation Reports be submitted, and then only to the third-party Coalition. The proposed WDR does not indicate what such reports will contain, so whether at that time they will provide the information relevant to applying the Policy is anybody's guess. And, as the above highlighted text makes clear, the degradation evaluation is to be done on a site-specific, or in this case, farm-specific basis.

Likewise, staff provides no data whatsoever about what any specific farm operation may be discharging to groundwater. Although such discharges are clearly occurring, the Board is not yet in any evidentiary position to apply the factors relevant to maximum public benefit and to declare any degradation acceptable under the High Quality Waters Policy.

The economic impact analysis conducted on a region-wide basis does not provide any evidence relevant to whether authorizing a discharge from any particular farm in the WDR area will be consistent with the maximum benefit to the people of California. Staff relies upon the 2010 *Draft Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program* prepared for the PEIR. *See* Information Sheet, p. 59. Although that cost analysis may be sufficient to comply with Water Code § 13141, it is not sufficient to conduct a site-specific degradation analysis applying the High Quality Waters Policy. Indeed, the proposed WDRs expressly disavow any applicability of its Section 13141 region-wide economic analysis to any individual farmers' costs or management measure decisions:

> Any costs for water quality management practices will be based on a market transaction between Members and those vendors or individuals providing

> services or equipment and not based on an estimate of those costs provided by the board.

Proposed WDRs, p. 11. Thus, the Section 13141 economic analysis does not reflect "costs to the discharger" required to be considered by the High Quality Waters Policy.

Staff's proposed rationales for the Regional Board to authorize wholesale degradation of water quality in the WDR area identify two almost generic assertions. One, that "Central Valley communities depend on irrigated agriculture for employment," and two, "[t]he state and nation depend on Central Valley agriculture for food…." Appendix A, p. 57. These generic assertions neither resemble the site specific factors identified by the State Board's Guidance and endorsed by the Court of Appeal nor allow for any coherent comparison of costs to specific dischargers and any cogent reason why they should be authorized to degrade high quality waters based on maximum benefit to all Californians. *Asociacion de Gente Unida por el Agua*, 210 Cal.App.4th at 1278. Any cogent review of the actual economic conditions prevalent in the area to be governed by the WDRs would show that farms, and in particular the larger farms operating within that area, are economically robust, forming a significant portion of a multi-billion dollar industry in the region. *See* Jennings Comments. Because staff has not provided any evidence of the covered dischargers' ability to pay for individual monitoring and management practices necessary to determine compliance with the WDRs and the Water Code, the Board is unable to make a determination of maximum benefit to the people of California.

Lastly, whether looking at surface water or ground water, the WDRs' proposed monitoring is so far removed from any specific source, the monitoring will not be capable of discerning any change in water quality from hundreds, perhaps thousands of farms in the WDR area. McHenry Comments, Bond Comments. Because the WDRs do not include any monitoring that would detect any changes in water quality from a discharge, the Regional Board will not know what degree of change is or may occur and, hence, cannot make any rational finding that allowing such change is consistent with maximum benefit to the people of the State. *Asociacion de Gente Unida por el Agua*, 210 Cal.App.4th at 1280 (where monitoring plan inadequate to detect degradation of waters, cannot make finding that such degradation will be of maximum benefit to the people of California).

It is clear that the Board's record currently is devoid of evidence necessary for it to consider whether any one discharger, nevermind thousands of dischargers, can be authorized en masse to degrade waters throughout a 1,770,000 acre swath of the Central Valley.

**4. The Regional Board Cannot Authorize Degradation of all Waters Within the WDR Area Because the Proposed WDR Conditions, Even if Complied With, Will Only Further Demonstrate That the Authorized Discharges will Result in Water Quality Less Than the Basin Plan's Water Quality Objectives**.

The current coalition program in the Sacramento Valley has been in place since 2003. Despite ten years of implementing the program continued by the proposed WDRs, no discernable improvement is evident:

> "The Sacramento River Watershed *2012 Water Quality Management Plan Progress Report,* is broken down into sub-watersheds and shows routine exceedance of water quality standards for: dissolved oxygen, pH, pesticides, pathogens, salinity, toxicity and trace metals. Clearly, water bodies accepting discharges from numerous represented irrigated lands are not meeting water quality objectives and existing high quality waters are not being maintained."

McHenry Comments. "Since many of the water bodies in the area have been designated as impaired and sampling shows routine exceedences of water quality standards, the represented agricultural practices have been shown to be not protective of water quality." *Id*. The few tweaks to the program proposed in the WDRs will not dramatically change these results. Indeed, given the proposed 10-year compliance schedules for addressing the few pollutants that may be included in a SWMP, the WDRs are guaranteed to allow discharges to continue violating water quality objectives for the foreseeable future. As a result, the Regional Board cannot make the required finding that the irrigated lands discharges in the WDR area "will not result in water quality less than that prescribed in state policies (e.g. water quality objectives in Water Quality Control Plans)," as required to authorize degradation down to standards.

Although the proposed WDRs proposes to begin breaking down the barrier to identifying management practices and pollution sources on specific farms by providing for a Farm Evaluation Report (albeit the proposal does not disclose what information will be requested in the FERs and, thus, it is impossible to evaluate whether the FERs will provide sufficient information), the WDRs rely for the most part on continuing the coalition group program that has been in place for the WDR area since 2003. Thus, although the SWMP appears to provide some additional discretion to the Executive Officer that may be applied at some point in the future, the SWMP continues to rely on regional monitoring coupled with a management planning process mirroring the waiver program. This monitoring scheme does not detect violations of water quality objectives for large expanses of the watersheds upstream of the monitoring stations. *See* Bond Comments, McHenry Comments. And it will continue to detect violations of the objectives at the stations if individual farmers' discharges are not meaningfully monitored. *Id*. "To the extent that the Order allows historic practices to continue without change, degradation will continue." *Asociacion de Gente Unida por el Agua*, 210 Cal.App.4th at 1273.

Likewise, although groundwater is included in the WDRs, the process to address discharges to groundwater relies on existing monitoring wells that will not pick up degradation. This program will neither detect nor prevent violations of the nitrate objective for the foreseeable future. *See Asociacion de Gente Unida por el Agua*, 210 Cal.App.4th at 1273. The Proposed WDRs only trigger ponderous, multi-year management

plans and more generalized receiving water monitoring upon multiple exceedances of a water quality objective and or a trend in degradation. This evidence does not provide evidence that the Board can rely on to find that discharges will not violate objectives.

The WDRs propose to allow 10-year long compliance schedules once a SQMP or GQMP is triggered or requested. Proposed WDRs, pp. 38-39. It is again entirely inconsistent with the High Quality Waters Policy for the Board to presume to allow degradation for dischargers who are not even complying with water quality objectives. The discharges will automatically result in water quality less than objectives, precluding any finding by the Board to the contrary. Likewise, such discharges are and will continue to "unreasonably affect present and anticipated beneficial use of such water." Accordingly, the Board also cannot make a finding to the contrary, as is also required to allow degradation under the Policy.

The fact that, as designed, the Proposed WDRs will not ensure compliance with applicable objectives, also is inconsistent with the Water Code's basic WDR requirements. WDRs "shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, [and] the water quality objectives reasonably required for that purpose,…." Water Code § 13263(a). Because the WDRs replicate existing waivers that have not implemented the applicable objectives, the Proposed WDRs fail to implement objectives.

### 5. The Regional Board Does Not Have Sufficient Evidence to Establish that All Dischargers Within the WDR Area are Implementing the Best Practical Treatment Controls for Discharges to Surface Waters and Ground Water.

Resolution No. 68-16 requires specific steps to protect high quality waters, including mandating the use of WDRs through specified technology-based effluent limitations. The High Quality Waters Policy provides, in relevant part, that:

> Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control ["BPTC"] of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

To comply with Resolution No. 68-16's BPTC mandate, the Regional Board must require the discharger to demonstrate that the proposed manner of compliance constitutes BPTC. *Asociacion*, 210 Cal.App.4th at 1282 ("The second step of Resolution No. 68-16's two-step process for determining whether a discharge into high quality waters is permitted, is a finding that the discharge will be required to undergo the "best practicable treatment or

control … necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained").

"In determining BPTC, the discharger should compare the proposed method to existing proven technology; evaluate performance data (through treatability studies), compare alternative methods of treatment or control, and consider the method currently used by the discharger or similarly situated dischargers." *See* SWRCB Order No. WQ 2000-07.

The Board does not yet have evidence of what any particular discharger within the WDR area is actually discharging to surface or ground waters. Instead of having evidence of what practices are currently in place for the current members of the Sacramento Valley Coalition, the Board relies upon future Farm Evaluation Reports based on templates the contents of which have not yet even been proposed. More than a year will pass after the Board issues the WDRs and, as proposed, the authorization of degradation, before any information about individual farms starts to flow into the Regional Board's files. Proposed WDR, p. 26. Without existing information about what each discharger within the WDRs area is implementing for management practices and data regarding the practices' effectiveness to control pollutants, there is no evidence upon which the Board can base a finding that each discharger is implementing BPTC.

There is no evidence in the record that a farm entity, especially a large farm, is any less economically capable of taking a few representative discharge samples as any small industrial business currently regulated by the industrial storm water permit. CSPA does not believe that any evidence has been presented that demonstrates there is a valid economic reason for not requiring every farmer to collect some water quality samples, expend funds necessary to have a pollution control plan, and expend funds to implement the necessary measures to assure that farm's pollution will neither degrade water quality nor violate standards. *See* Exhibit C.

Staff's proposed "Farm Management Performance Standards" do not provide staff evidence justifying a determination to authorize degradation throughout the Sacramento Valley watershed. *See* Proposed WDRs, p. 21. Even assuming the performance standards somehow provide more guidance than already is apparent on the face of the Basin Plan or even the existing waivers, the Board still cannot meaningfully evaluate or apply the High Quality Waters Policy as it applies to any given discharger in the Watershed by having them submit information after the decision to allow degradation is made and without any information about the actual pollution that farm is discharging or even which river or channel it is discharging to and the quality of that receiving water.

## D. IN ADDITION TO PROPOSING UNSUPPORTED FINDINGS TO AUTHORIZE DEGRADATION, THE DEGRADATION AND VIOLATIONS OF WATER QUALITY OBJECTIVES THAT WILL RESULT FROM THE WDRS IS INCONSISTENT WITH THE HIGH QUALITY WATERS POLICY.

### 1. The Proposal to Authorize Degradation Admits That Implementation of the Proposed WDRs Will Continue to Degrade Water.

By proposing to abandon any effort to avoid degradation of high quality waters, Regional Board staff concedes that a program based on regional monitoring and third-party outreach to actual dischargers does not assure that waters will not be degraded. Because the Board cannot make the requisite findings to support a decision authorizing degradation, the WDRs as proposed will degrade high quality waters in violation of the High Quality Waters Policy.

Additionally, repeating the flaw in the existing renewed waiver that was rejected by the Sacramento Superior Court, the proposed WDRs again do not bother to link even the general management practice responses to degradation. Instead, in regard to both surface and ground water pollution, the proposed WDRs trigger the general management responses by the third party when objectives are exceeded or where the EO determines that "irrigated agriculture is causing or contributing to a trend of degradation of surface water that may threaten applicable Basin Plan beneficial uses." Proposed WDRs, pp. 34. Moreover, even this possibility is made less likely by the very next provision which says the EO may relieve the third party of a SQMP or GQMP when members only meet the applicable water quality objectives and a management plan will not likely remedy the exceedance. *Id*., p. 34. The proposed WDRs do not comply with the obvious flaw found by Judge Frawley that the requirements are not geared to address degradation, but rather exceedances of other water quality measures including the same objectives rejected by Judge Frawley and unidentified "trends" in degradation. Order, p. 19. The High Quality Waters Policy does not merely guard against adverse trends in degradation, but any degradation. Because once again the proposed WDRs blink in fully enforcing the Policy, the proposed WDRs suffer from the same error as that found by Judge Frawley for the renewed waiver.

In addition, the Court of Appeal also has rejected a similar process attempted in the general dairy WDRs leaving future potential compliance with the degradation restrictions to the Executive Officer at his/her discretion. Thus, in addressing the Regional Board's contention in the General Dairy WDRs that water would not be degraded because the Executive Officer had authority to order additional monitoring, the Court of Appeal did not agree future action by the EO applying his/her discretion was, by itself, sufficient to prevent degradation. *Asociacion de Gente Unida por el Agua*, 210 Cal.App.4th at 1277. This was due, first, to the fact that such discretion was not applied to all dischargers governed by the general WDRs but "required only at the discretion of the executive officer." *Id*. Second, the Court rejected open-ended discretion as a stand-in for assurances that degradation would not occur because "there are no mandatory standards governing the

exercise of the executive officer's discretion." *Id*. Lastly, the Court rejected mere discretion by the EO, because it was triggered by monitoring that, by its nature, already established that degradation had occurred. *Id*. The same is true by the monitoring triggers included in the proposed WDRs, which await exceedances of objectives and "trends" in degradation before the EO may act and, even then, the EO may choose not to require even the broad management plans.

For these reasons, the proposed WDRs allow degradation and, absent adequate findings by the Board authorizing degradation down to standards, no such degradation is allowed.

**2. Monitoring Surface or Ground Waters Many Miles Downstream of Pollution Sources Will Neither Detect Nor Prevent Degradation or Upstream Exceedances of Water Quality Objectives.**

Although Judge Frawley did not choose to rule on whether the regional monitoring stations that were implemented pursuant to the renewed waiver were sufficient to comply with the High Quality Waters Policy, he did state:

> It also is questionable whether the Renewed Waiver is sufficient to comply with the Antidegradation Policy since it is not clear that the Board has an adequate means of identifying and taking actions against dischargers who are violating water quality objectives when water quality objectives are being exceeded, or of ensuring that BPTC is being implemented when high quality water is being degraded.

Order, p. 19. The same inadequacies are present in the Proposed WDRs. The monitoring stations anticipated by the Proposed WDRs are essentially the same as those present pursuant to the renewed waiver. Those stations cannot and will not detect violations of water quality objectives or degradation more than a short distance upstream. McHenry Comments; Bond Comments. As a result, numerous upstream violations will go undetected. Even where the stations confirm a standard violation or serious degradation, the Board will not know which upstream farms are responsible. *Id*. Nor will a simple, yet-to-be-defined FER indicate whether or not BPTC is in place for every upstream farmer. The Board's reliance on regional monitoring in an effort to spare individual farmers the burden of making sure they are not degrading the State's waters will never be sufficient to detect pollution and degradation or violations of objectives occurring some significant distance upstream. As a result, the Proposed WDRs are inconsistent with the High Quality Waters Policy as well as Water Code § 13263(a) (WDRs "shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, [and] the water quality objectives reasonably required for that purpose,…").

In the past, Regional Board staff has admitted that general discharge requirements relying on regional monitoring will not produce monitoring able to detect violations of water quality standards for large expanses of upstream waters. Former Regional Board Program Manager for the Irrigated Lands Program, Bill Croyle, has testified that "main stem, downgradient monitoring … is going to tell us a very limited amount of information with regards to what is going on upstream in the watershed." Testimony of Bill Croyle (March 5, 2003) (AR2776).

Watershed- or regional-based monitoring cannot detect water quality levels miles upstream. Previous expert testimony from three former Regional Board staff and two other experts has been presented to the regional Board clarifying this basic point. Former Regional Board staff engineers and managers Steve Bond, Joanne Kip and Richard McHenry each testified both orally and in writing that the renewed regional monitoring scheme would not detect most of the site-specific or area-specific water quality problems occurring in the Central Valley. Comments of Steven Bond, PG, CEG, CHG (Sept. 27, 2010); Written Testimony of Steven Bond (April 7, 2011) (AR101869); Written Testimony of Richard McHenry (April 7, 2011) (AR101871); Written Testimony of Jo Anne Kipps (April 7, 2011) (AR101870); Oral Testimony of Steven Bond, Jo Anne Kipps & Richard McHenry (April 7, 2011) (AR3029.225-.232); Comments of G. Fred Lee, Ph.D. (Sept. 25, 2010) (AR101943, AR101949); Comments of Matt Hagemann (Sept. 10, 2010) (AR101829). As Mr. Bond, a certified geologist and hydrogeologist, explained in 2010 during the proceedings on the current waiver:

> You asked if the downstream water quality of a complex watershed composed of multiple sub- watersheds, is a valid measure of the water quality in any or all of the individual sub-watersheds. My answer is no. While gross average conditions may be observed downstream, the conditions of individual upstream sub-watersheds will remain unknown. Between the downstream monitoring station and the various upstream watersheds, mixing and dilution occurs and the conditions at any upstream point are obscure to the downstream location.

Comments of Steven Bond, PG, CEG, CHG (Sept. 27, 2010). See also Written Testimony of Steven Bond (April 7, 2011) (AR101869) ("My professional opinion is that in a complex watershed composed of multiple sub- watersheds, water samples from distant downstream locations, such as most of the monitoring locations in this program, are not valid representations of the water quality in any or all of the individual sub-watersheds"); Oral Testimony of Steven Bond (April 7, 2011) (AR3029.227-3029.228). Mr. Bond has prepared additional testimony specific to the proposed WDRs and confirmed that the WDRs' continuation of regional monitoring will not be sufficient to detect violations of objections and degradation any significant distance upstream. Bond Comments.

Richard McHenry, former supervisor of the Regional Board's Sacramento Valley NPDES permitting unit, explained that regional impacts could be caused "by any number of

upstream dischargers or circumstances, and cannot be directly linked to any specific discharge point" by sampling at a regional location. Oral Testimony of Richard McHenry (April 7, 2011) (AR3029.231). "Based on the regional monitoring that is being proposed, I cannot see any reasonable means of taking enforcement against individual dischargers to effectively protect water quality." *Id*. Mr. McHenry has prepared additional testimony specific to the proposed WDRs describing the inadequacy of the WDRs' continued regional monitoring to detect violations of objectives and degradation for most parts of the 582,000 acre WDR area.

Jo Anne Kipps, a 12-year veteran of the Regional Board's waste discharge regulatory program, also noted during the renewed waiver proceeding that the waiver "relies on an inadequate regional monitoring scheme that cannot and will not provide information to this Board necessary to characterize current conditions, let alone, monitor the effectiveness of best management practices as these are implemented." Oral Testimony of Jo Anne Kipps (April 7, 2011) (AR3029.230-.231). Dr. G. Fred Lee, Ph.D., provided a thorough explanation of the monitoring gap extended into the proposed WDRs:

> In our previous comments we stressed the need for monitoring at the edge-of-the-field and in nearby state waters to define the worst-case impacts of toxic and other chemicals discharged from agricultural activities. In some waterbodies the worst case impacts could be detrimental to fish spawning/rearing areas that would not be detected by the current downstream at a single monitoring location as practiced in the current monitoring program. This type of monitoring is also essential to evaluate the effectiveness of management practices to control WQO violations in the states waters.

Comments of G. Fred Lee, Ph.D. (Sept. 25, 2010) (AR101943). Dr. Lee explained further:

> The Lee and Jones-Lee April 13, 2007 comments focused on the unreliable approach that the staff had proposed for the basic monitoring approach of allowing the coalitions to satisfy the MRP requirements based on one grab sample per month at a downstream location. As Lee and Jones-Lee discuss; this monitoring approach cannot reliably provide the data needed to meet the MRP stated objective of detecting violations of CVRWQCB Basin Plan objective by agricultural runoff/discharges. Such a monitoring approach could readily fail to detect upstream adverse impacts of agricultural discharges that are not detected at downstream monitoring locations.

*Id*. (AR101949). Driving the point home even further, hydrogeologist Matt Hagemann commented during the waiver process that, "[b]ecause of the reliance on current management practices and because only regional monitoring is to be used, Alternative I [the Renewed Waiver] would not result in measureable improvement to water quality and

in fact foster further degradation of water quality." Comments of Matt Hagemann (Sept. 10, 2010) (AR101829).

> Likewise, Regional Board staff also explained during the waiver proceeding that,
>
> If the selected ILRP alternative's monitoring program is regional in nature (i.e., individual field effects on receiving waters are not monitored), it is not possible to determine whether and how much each operation is contributing to the problem— water quality assessment and feedback mechanisms are based on the watershed-scale for multiple sources. Therefore, the ILRP requires that operations that potentially contribute sources to the problem implement management practices designed to minimize their contribution.

Irrigated Lands Regulatory Program FEIR, p. 3.2-39 (March 2011) (AR237). Only if a specific farm opts to exclude itself from a coalition program would the Regional Board proceed to issue an order that assures that a particular farm would achieve water quality standards and comply with the Antidegradation Policy:

> Agricultural operations that do not wish to participate in implementing practices under the ILRP have the option to file a report of waste discharge and obtain individual waste discharge requirements. These requirements would specify individual monitoring of effluent and/or receiving waters designed to ensure that the operations waste discharge does not cause or contribute to an exceedance of water quality objectives and that BPTC is implemented where there is degradation of a high quality water.

*Id*. If the regional monitoring scheme of the Renewed Waiver or the Proposed WDRs were truly sufficient to protect receiving waters adjacent to non-coalition farms, no such site-specific WDRs would be necessary.

The significant divide between the Proposed WDRs' regional monitoring locations and the miles of waterways and the hundreds of sources upstream of the monitoring locations is an example of the same faulty monitoring scheme recently rejected by the Court of Appeal in *Asociacion de Gente Unida por el Agua* as violating the antidegradation policy:

> The crucial question of fact in this case is whether the monitoring system prescribed in the Order is adequate to ensure the Order's directive that no further degradation of groundwater shall occur. Appellants point to evidence in the record indicating the Order's monitoring method is inadequate. Regional Board cites no contrary evidence. Thus, there are no facts from which any court could determine the monitoring system is adequate to detect and prevent further groundwater degradation. The interpretation of the antidegradation policy and the Order are generally matters of law.

210 Cal.App.4th at 1267. Like the supply wells required to be monitored by the Regional Board in the general permit issued for dairy discharges that were located a significant distance from the source of the potential degradation (manure ponds), the Proposed WDRs' regional monitoring locations are "ineffective to accomplish the timely detection of a change in [water] quality." 210 Cal.App.4th at 1260. Like the vacated dairy WDRs, additional upstream monitoring of any sort is not required unless the regional, i.e. distant, monitoring sites already show an adverse impact. *Id*. The fact that follow-up management plans may be triggered does not cure the fact that the prescribed monitoring locations will not monitor localized areas that feel the full brunt of one or more irrigated land dischargers' pollution. Like the dairy WDRs, follow-up management plans by the coalition are only triggered after multiple violations of water quality objectives already are detected or a "trend" in degradation, far downstream of most sources. Like the dairy WDRs management plan triggers, that triggering event already establishes that water quality objectives are being violated and beneficial uses unreasonably affected. *See* 210 Cal.App.4th at 1276-77. Thus, whatever discretion the Regional Board staff may have to require or review management plans by the coalitions does not "ensure … that no further degradation of [Central Valley waters] shall occur." *Id*.

A Regional Board order does not comply with the antidegradation policy where it relies on monitoring requirements that "are inadequate to detect … degradation, much less prevent it." *Id*. at 1272-73. Like the monitoring locations in the dairy WDRs, expert testimony in the record for the renewed Waiver and now the Proposed WDRs discloses that regional monitoring locations far downstream from almost all of the irrigated lands' pollution sources "are not located in the proper areas to detect degradation," or violations of objectives and, even after a decade of implementation, have not shown pollution during that time for any localized areas upstream, even if those areas exceed standards. *Id*. at 1275. Because the Proposed WDRs' monitoring provisions "do[] not provide either an accurate or a timely indication of [water] degradation" or violations of objectives, the Regional Board cannot find, based on the weight of the evidence, that the Proposed WDRs comply with the antidegradation policy or Water Code § 13263(a) for all, indeed, the vast majority of waters it presumes to protect. *Id*.

## E. The Proposed WDRs Do Not Comply With the Nonpoint Source Policy

The Proposed WDRs fail to comply with the Board's duty to comply with the Nonpoint Source Policy adopted by the State Board in 2004. Water Code § 13146, 13247; Policy For Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 20, 2004). The Nonpoint Source Policy includes five key elements with which any nonpoint source program adopted by a Regional Board must abide. "Prior to developing an NPS control implementation program or recognizing an implementation program developed by dischargers or third-parties as sufficient to meet RWQCB obligations to protect water quality, a RWQCB shall ensure that the program meets the

requirements of the five key structural elements…." Nonpoint Source Policy, p. 11. The Proposed WDRs are inconsistent with at least three of the five key elements.

### 1. The Proposed WDRs fail to rely on the weight of the evidence that the WDRs are consistent with Key Element 1 of the NPS Policy.

The Nonpoint Policy's Key Element 1 states that "[a]n NPS control implementation program's ultimate purpose shall be explicitly stated. Implementation programs must, at a minimum, address NPS [nonpoint source] pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements." Nonpoint Source Policy, pp. 11-12. "Before approving or endorsing a specific NPS pollution control implementation program, a RWQCB must determine that there is a high likelihood the implementation program will attain the RWQCB's stated water quality objectives." *Id*., p.11.

> An NPS control implementation program must be specific as to the water quality requirements it is designed to meet. For example, if the program relies upon dischargers' use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements. The program also should provide other information as required by the RWQCB, including but not limited to the identification of participant dischargers. The RWQCB must be able to ensure that all the significant sources of the NPS discharges of concern are addressed.

*Id*., p.12 (emphasis added).

Reviewing the current waiver, the Superior Court found that its general requirements were inconsistent with the High Quality Waters Policy, it also violated Key Element 1. Order, p. 20. Because the Proposed WDRs also run afoul of the Policy and do not assure compliance with objectives, they also are inconsistent with Key Element 1. As the Court explained:

> Key Element 1 states that a nonpoint source control implementation program must, at a minimum, address nonpoint source pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements. [citations omitted.] For the reasons described above, the Court finds that the Renewed Waiver is inconsistent with applicable antidegradation requirements. Accordingly, the Renewed Waiver is inconsistent with Key Element 1 of the Nonpoint Source Policy.

Order, p. 20.

As discussed above, the weight of the evidence does not demonstrate that the Proposed WDRs address irrigated lands discharges within the WDR area in a manner that achieves and maintains water quality objectives and beneficial uses and complies with the High Quality Waters Policy. The Regional Board does not and, depending on the contents of the FERs, may not know the "specific MPs [management practices] implemented" anywhere in the WDR area. *See supra*. Indeed, the FERs will not include any maps of the respective dischargers. This alone will render the FER largely an exercise in paperwork rather than a stepping-stone to effective management practices or water quality protection.

Moreover, the regional-based water quality monitoring does not allow the Regional Board to correlate "the specific MPs implemented and the relevant water quality requirements." Nonpoint Source Policy, p. 12. Only within a portion of the WDR area in which water quality standards are violated in the downstream waters will there be any effort by third-parties to correlate some MPs on some farms to those exceedances. Even in an impaired watershed, under the Proposed WDRs, the coalitions need not disclose to the Regional Board which specific farms and specific MPs on those farms are at issue. And because the water quality is only measured downstream in a given watershed or sub-watershed, numerous upstream waters that may be in violation of standards from irrigated lands discharges will go undetected, allowing for no correlation whatsoever with MPs. Thus, the Proposed WDRs do not come close to addressing all of the significant irrigated lands pollution sources in the WDR area, as required by Key Element 1.

**2. The Proposed WDRs fail to rely on the weight of the evidence that the Proposed WDRs are consistent with Key Element 2 of the NPS Policy.**

Key Element 2 of the NPS Policy provides that: "[a] nonpoint-source control implementation program must include a description of the management practices and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose, the process to be used to select or develop management practices, and the process to be used to ensure and verify proper management practice implementation." Nonpoint Source Policy, p. 12. "A RWQCB must be convinced there is a high likelihood the MP will be successful." *Id*. "MPs must be tailored to a specific site and circumstances, and justification for the use of a particular category or type of MP must show that the MP has been successfully used in comparable circumstances. If an MP has not previously been used, documentation to substantiate its efficacy must be provided by the discharger." *Id*.

If the evidence available to the Regional Board demonstrates anything, it is the opposite of what Key Element 2 requires – the current MPs used by irrigated lands dischargers within the WDR area have been unsuccessful in preventing violations of water quality standards. The Regional Board assumes that every discharger in the WDR area has some sort of management practices in place. According to the record, a large percentage of rivers, streams and channels in the WDR area are impaired by pollutants discharged by irrigated lands. Bond Comment; McHenry Comment. The Sacramento Valley Water Quality

Coalition's regional monitoring, even with the benefit of commingling with other waters, confirm that large quantities of pollutants are violating water quality standards throughout the coalition area. *Id*. And, at least in those places where downstream violations have been detected, the coalition has surveyed for existing management practices and asked their members to perhaps employ additional management practices. However, there is no evidence, and certainly no "high likelihood," that more of the same management practices will achieve compliance with standards, either at the downstream monitoring sites and certainly not in the local receiving waters. Because there is effectively no monitoring of receiving waters adjacent to where the farms are discharging, the water quality standard violations occurring in those waters will remain undetected and the Regional Board will continue to proceed with no evidence demonstrating any likelihood that any current management practices will achieve standards in those waters. Even at the downstream monitoring sites, the record is clear that neither the Board nor the coalition can say whether the management practices will work.

Nothing in the available evidence suggests that the Proposed WDRs' regional monitoring requirement can detect violations of water quality standards in all upstream waters or evaluate the effectiveness of BMPs to prevent such violations well upstream of the regional monitoring locations. By omitting any measurements of what is happening in local waters adjacent to discharge locations, the Proposed WDRs cannot evaluate whether management practices are "tailored to a specific site and circumstances." Nor is there any evidence upon which the Regional Board could determine that implemented management practices are "highly likely" to be successful and attain standards in those upstream waters. There is no evidence of any studies or data demonstrating the effectiveness of any management practices in the Central Valley to achieve discharges that comply with water quality standards. By avoiding any edge of field or BMP monitoring until some undefined moment at the EO's discretion in the indefinite future, the Proposed WDRs assures the continuation of this information gap.

### 3. The Proposed WDRs fail to rely on the weight of the evidence that the Proposed WDRs are consistent with Key Element 4 of the NPS Policy.

Key element 4 of the NPS Policy requires that "[a]n NPS pollution control implementation program must include sufficient feedback mechanisms so that the Regional Water Board, dischargers, and the public can determine whether the program is achieving its stated purpose, or whether additional or different management practices or other actions are required." Nonpoint Source Policy, p. 13. "In all cases the NPS control implementation program should describe the measures, protocols, and associated frequencies that will be used to verify the degree to which the MPs [management practices] are being properly implemented and are achieving the program's objectives, and/or to provide feedback for use in adaptive management." *Id*. "[I]f the program relies upon dischargers' use of MPs, there should be a strong correlation between the specific MPs implemented and the relevant water quality requirements." *Id*., p. 12.

The Superior Court ruled that the existing waiver failed to achieve Key Element 4 for failing to include sufficient feedback mechanisms to protect both groundwater and high quality waters. Order, p. 21. There are no confirmed feedback mechanisms in the WDRs either. No mechanisms exist to either detect or react to violations of water quality objectives many miles upstream of the coalition's relatively few monitoring stations. Every potential future action by a discharger is first qualified by action by the executive officer only after trends in monitoring (even a violation of a standard does not assure this trigger is met). Nor is it clear how many violations must accrue before there is a trend. Nor is there any effort yet for the board to determine what the existing water quality is and identify the high quality water that has been achieved any time in the past.

As previously discussed, expert evidence shows that the Renewed Waivers regional monitoring requirements are indeed incapable of identifying the effectiveness of upstream management practices. Bond Comments; McHenry Comments. And the fact that, even after eight years of implementation, the Sacramento Valley Water Quality Coalition has not produced any information describing the locations of management practices actually in place in the coalition's area and the effectiveness of such practices, roundly demonstrates that the Proposed WDRs have no feedback mechanism to evaluate MPs, especially one designed to establish "a strong correlation between the specific MPs implemented and the relevant water quality requirements."

Nor do the truncated FERs proposed by the WDRs inform either the Regional Board or the public about the effectiveness of those management practices. No maps will certainly be provided of any specific farm and its discharges. The FERs will remain sequestered in the third-party's files unless and until the Regional Board staff chooses at its discretion to obtain a copy. Nor will those reports indicate any useful information about whether MPs are being properly implemented. Nonpoint Source Policy, p. 13. Thus, the Proposed WDRs do not contain feedback mechanisms by which either the Regional Board or the public could "determine whether the program is achieving its stated purpose, or whether additional or different management practices or other actions are required." *Id*.

## F. Various Plans and Reports Identified As Subject Only to Review and Approval by the Executive Director Should Be Presented to the Regional Board for Review and Approval

The Proposed WDRs delegate considerable discretion to the Executive Director to review and approve third-parties and various plans. These include the initial approval of one or more third-parties to implement the WDRs (Proposed WDRs, p. 29 (¶ VIII.A), Sediment and Erosion Control Plans (*Id*., p. 27 (¶ VII.C)), Nitrogen Management Plans (*Id*., p. 27-28 ((¶ VII.D), Surface Water Quality Management Plans ("SQMP") (*Id*., p. 33 (¶ VIII.H.1), and Groundwater Quality Management Plans ("GQMP") (*Id*.). The Proposed WDRs also would authorize the Executive Officer to waive the preparation of a SQMP or GQMP. *Id*., p. 34 ((¶ VIII.H.3). Each of these plans and approvals involve the election of waste discharge

requirements and, as a result, cannot be delegated to the Executive Officer but must instead be reviewed and approved by the Regional Board itself.

Water Code § 13223(a) provides that "[e]ach regional board may delegate any of its powers and duties vested in it by this division to its executive officer excepting only the following: … (2)the issuance, modification, or revocation of any … waste discharge requirement…." Water Code § 13223(a)(2).

SQMPs and GQMPs plainly constitute waste discharge requirements. The Plans' requirements including establishing time schedule, performance goals, and monitoring locations, which are the types of requirements included in WDRs. *See* Appendix MRP-1. In particular, there can be no dispute that time schedules are waste discharge requirements specifically identified by Section 13263(c): "The requirements may contain a time schedule, subject to revision in the discretion of the board." *See also, e.g.* 33 U.S.C. § 1362(11) (in NPDES permits, WDRs also serve as effluent limitations which are defined as "any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents…, including schedules of compliance"). Because the SQMP and GQMP both propose to incorporate compliance schedules set forth in the WDRs, both of those plans constitute WDRs that cannot be delegated by the Board to the Executive Officer.

Because the SQMP and GQMP are both WDRs, any decision to waive those requirements also cannot be delegated to the Executive Officer. That proposed provision must be brought to the regional Board for action. *See* Proposed WDRs, p. 34 ((¶ VIII.H.3).

What sediment and erosion control measures may be applied and who may apply them is left to the as yet to be identified third party. (Proposed WDRs, pp. 26-27 (¶ VII.C)). This provision effectively delegates all WDRs associated with sediment discharges to the dischargers' representative, subject only to the approval of the Executive officer. These sediment and erosion WDRs must be reviewed and approved or disapproved by the Regional Board. Water Code § 13223(a)(2).

The Nitrogen Management Plan and Nitrogen Management Plan Summary Report plainly include WDRs that cannot be delegated to the Executive Officer. These are the primary mechanisms relied upon by the Proposed WDRs to control nitrate discharges to groundwater. The WDRs do not bother to adopt a template, instead leaving that of the Executive Officer. The plans themselves ask the third party to self-regulate subject only to the approval of the executive Officer. These substantive discharge requirements must be reviewed and approved by the Regional Board using their public decision-making process.

Consistency with Water Code § 13223(a)(2) is not achieved by merely authorizing discretionary review by the Regional Board of Executive Officer decisions that cannot be delegated to the EO in the first place. Discretionary review that need not be exercised by the regional Board for any or no reason still improperly delegates the above WDR decisions

to the Executive Officer. All of the above identified decisions must be made by the regional Board itself.

**CONCLUSION**

Why is staff in such a hurry to have the Board make a determination to allow degradation of water quality throughout the Watershed? In effect, staff is asking the Board to erase the high quality waters policy from the irrigated lands program coalition-by-coalition. If the Board agrees that, despite the absence of any information about where the high quality waters may be or any details about any particular discharger in this entire watershed, everyone in the watershed can degrade waters down to standards, then all future renewals of the WDRs will be relieved of having to deal with high quality waters. Such a wholesale retreat from the purpose and goals of the Policy is simply unprecedented. The Board should reject the WDRs and request staff to prepare WDRs that address each of the above comments and prevent, rather than embrace, degradation of water quality.

The following comments by Steve Bond, Richard McHenry and Bill Jennings are incorporated into this submittal, as are the three attached references. Again, thank you for this opportunity to comment on the proposed waste discharge requirements for discharges from irrigated lands within the Sacramento River Watershed area

Sincerely,

Bill Jennings
California Sportfishing Protection Alliance
California Water Impact Network

Date: 20 January 2014

From: Steve Bond

To: Michael Lozeau, Lozeau/Drury LLP
410 12th Street, Suite 250 Oakland, CA 94607
michael@lozeaudrury.com

Subject: Irrigated Lands Regulatory Program, Proposed Waste Discharge Requirements General Order For Growers Within The Sacramento River Watershed That Are Members Of The Third-Party Group, Surface Water Monitoring and Sampling, 2008 through 2011.

The proposed Waste Discharge Requirements lack a representative monitoring program and as a result is not protective of the beneficial uses within the Sacramento River Watershed.

Because the protection of the beneficial uses of waters of the State is a function of the ability to monitor those waters to determine their quality, it is absolutely imperative that a representative monitoring program be in place. Yet, the proposed permit fails to provide basic protections of water quality. Contrary to the claim of Finding 39 of the Order, the Order will not result in the implementation of best practicable treatment or control (BPTC) by those discharging to high quality waters because the Order lacks satisfactory monitoring requirements. Deficient monitoring requirements precludes representative characterization of receiving water quality. This in turn prevents identification of high quality waters. It also

restricts characterization of adversely impacted or impaired waters. Hence, protection of beneficial uses is made unfeasible if high quality waters cannot be identified.

Attachment A of the WDR's discuss the definition of 'high quality waters'. However, I have not found any documentation identifying high quality waters in the watershed covered under the subject WDR's.

The Sacramento River Watershed region includes 2,770 square miles of watershed and is drained more than 29,000 linear miles of water courses that are, or could be, affected by discharges of waste from irrigated lands (WDR Findings 12 and 13). In the most recent annual monitoring report (Sacramento Valley Water Quality Coalition Annual Monitoring Report - SVWQC AMR - 2011), the Coalition had a total of 24 monitoring stations. On average, that amounts to more than 100 square miles of land and more than 1200 linear miles of water course per single monitoring station. However sparsely distributed, the stations are not equally distributed. One station, PRPIT on the Pit River is used to represent well over a thousand square miles watershed. That is one sample point for a watershed greater than the size of the state of Rhode Island.

Monitoring only the major watercourse at the downstream-most position of any watershed, however vast, completely disregards the protection of the beneficial uses of all but the lowest elevations of these waterways.

Evaluating the effectiveness of a technology or a practice requires that the change in water quality attributable to the specific practice or technology be verified. To do that a reference sample from the point of discharge and then a comparison sample taken from the same location after the technology or practice is implemented must be collected and analyzed. In actual practice, multiple samples over range of operating conditions must be collected to verify positive changes. It is not reasonable to think that the effectiveness of a technology or practice can be known without verifying it by testing the discharge water. This requires monitoring at the edge of the field by collecting and testing the water samples before the discharge water is mixed and diluted. The inability to identify and characterize pollution at its source invalidates any effort to verify or evaluate the effectiveness of pollution treatment or control at the source.

Not only are the impacts to distant upstream waters unknown, it is not possible to evaluate the effectiveness of a farm's water treatment system or of its management practice (BMP) from a distant downstream monitoring location. Between the point of discharge and the point of sample collection, the discharge water is mixed and diluted. Other waters from natural and industrial sources of unknown quality and character such as other agricultural discharges alter and mask the defining character of the discharge water. Any changes in water quality due to a particular management practice at farm is concealed within this soup of natural waters and pollutants, thus the performance of the BMP is essentially unknowable. The point of discharge is the only representative monitoring

point for evaluating BMP performance.

The problem of determining the quality and character of distant upstream water conditions is made more difficult within a complex watershed composed of multiple sub-watersheds. In such cases like the Sacramento River Watershed region, each watershed must be individually evaluated and each discharge separately monitored. The downstream water quality is not representative of the conditions in the sub-watersheds or of any point of discharge from the edge of the field. Downstream water quality may, at best reflect the gross average conditions of the dominant flows into the watershed; it will not provide information about small tributary streams, lesser flows, or conditions close to points of the individual agricultural discharge. The downstream water quality is not a valid measure of the water quality in any or all of the individual sub-watersheds. Given only downstream monitoring data, the specific conditions of individual upstream sub-watersheds are not effectively monitored, sources of pollution remain hidden, best practicable treatment or control of pollutants is unfeasible, and the beneficial uses of the upstream waters are left unprotected.

The AMR's state that the first objective of the monitoring program is to "assess the impacts of waste discharges from irrigated lands to surface waters", (SVWQC AMR's Monitoring Objectives, 1). However, sampling and/or monitoring of points of discharge from irrigated agriculture are not documented in these reports. Only sample results from

distant downstream stations are reported. From these solitary, remote locations, hundreds of square miles of agricultural operations and thousands of miles of waterways are ineffectively observed and the effects of waste discharges scores of miles distant are improperly assessed.

For example, the monitoring station on the Pit River at Pittville Bridge (PRPIT) is used to monitor the discharge from 135 square miles of irrigated agriculture upstream of the station (Attachment A of the WDR's). The irrigated agricultural lands discharge into the Pit River watershed below Goose Lake. The area of this watershed is more than 1,500 square miles. This vast watershed is greater than the entire State of Rhode Island. Yet, a single station monitors discharges from less than ten percent of the watershed from scores of miles distant. The less than 10% discharge is mixed and diluted with the drainage from 'other' 90%. Downstream water quality will at best reflect only the gross average conditions of the dominant flows into the watershed, which are not the discharges of the irrigated agriculture. Significant variations in irrigated agricultural discharges will not be discernable above background variations. High quality waters will not be identified, nor will upstream impacts to water quality, and the effectiveness of wastewater BMP's will not be known.

The various AMR's document toxicity, and exceedances of numerical pollutant criteria at the downstream monitoring stations, yet they fail to characterize upstream water quality. The AMR's make no statements defining high quality waters, and make no statements regarding the

protection of beneficial uses of Waters of the State.

Given that under the proposed Order the discharges from irrigated agriculture are never directly measured, the existing stations, always distant points downstream, will never definitively identify the sources of pollution or characterize upstream water quality. Under the existing program and the proposed Order, the sources of pollution and impairment will likely remain undefined, and a matter only for speculation. The identification of high quality waters will not be possible for the reasons stated above.

**Memorandum**

21 January 2014

To: Michael Lozeau, esq., Bill Jennings

From: Richard McHenry, PE

Subject: Sacramento River Watershed, Proposed Waste Discharge Requirements (WDRs) Comments, Focused comments on Surface Water Sampling

The following are my findings and comments following review of the proposed waste discharge requirements (WDRs) General Order for growers within the Sacramento River Watershed. I also reviewed the available monitoring data, management plans, CEQA documents and supporting information for the proposed WDRs.

Findings and Facts

The Sacramento River Watershed has approximately 2.36 million acres of cropland under irrigation and approximately 15,000 growers with "waste discharges from irrigated lands". Approximately 12,000 growers and 1,777,000 associated irrigated acres including managed wetlands will require regulatory coverage under the proposed WDRs. (WDR Finding 12) Small farming operations, comprising 61% of growers, account for approximately 4% of the total irrigated lands. (Information Sheet, p. 37) Therefore, the 61% of small growers irrigate approximately 71,000 acres, or an average of 7.8 acres each, while the 39% of large growers irrigate approximately 1,706,000 acres, or an average of 365 acres each.

The Sacramento River Watershed has approximately 29,000 linear miles of surface water courses that are, or could be, affected by discharges of waste from irrigated lands. (WDR Finding 13) Approximately 102 water bodies encompassing 2,600 linear miles of surface water courses have been listed as impaired pursuant to Clean Water Act section 303(d) within the third-party area. Agriculture is identified as the potential source of impairment for approximately 29 of the 303(d)-listed water bodies. (WDR Finding 16)

The water quality monitoring under the proposed WDR is "representative" in nature instead of and does not measure individual field discharge monitoring. (WDR Finding 23) It is argued that representative monitoring will allow the Board to determine whether wastewater bodies accepting discharges from numerous represented irrigated lands are meeting water quality objectives, to determine if existing high quality waters are being maintained, to determine whether farming practices are protective of water quality and representative monitoring provides a significant cost savings since all surface waters or all groundwater aquifers that receive irrigated agricultural discharges are not monitored. The proposed Order, (Finding 23) does admit that: "*there are limitations to representative monitoring's effectiveness in determining individual sources of water quality problems, the effectiveness of management practices, and individual compliance with this Order's requirements*". Monitoring under traditional WDR's and NPDES permits require monitoring of the wastewater discharge as well as the receiving water and/or groundwater. While the proposed WDR requires "representative" monitoring, it allows the Executive Officer to require

technical reports when monitoring or other available information is not sufficient to determine the effects of irrigated agricultural waste discharges to state waters.

In May 2004, the State Water Board adopted the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy). The purpose of the NPS Policy is to improve the state's ability to effectively manage NPS pollution and conform to the requirements of the Federal Clean Water Act and the Federal Coastal Zone Act Reauthorization Amendments of 1990. The NPS Policy requires, among other key elements, an NPS control implementation program's ultimate purpose to be explicitly stated. It also requires implementation programs to, at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.

Monitoring was performed at 38 sites. (SVWQC Management Plan, January 2009, Appendix A)

Fact Summary

The Sacramento River Watershed has approximately:

- 1.8 million acres of cropland under irrigation.
- 12,000 growers with waste discharges from irrigated lands.
- The area has approximately 29,000 linear miles of surface water courses.
- 102 water bodies, encompassing 2,600 linear miles of surface water courses have been listed as impaired pursuant to Clean Water Act section 303(d) within the third-party area.
- Monitoring is conducted at only 38 sites.

Comments

Clearly water bodies accepting discharges from numerous represented irrigated lands are not meeting water quality objectives and existing high quality waters are not being maintained as WDR Finding No 16 states that: "*Approximately 102 water bodies encompassing 2,600 linear miles of surface water courses have been listed as impaired pursuant to Clean Water Act section 303(d)7 within the third-party area. Approximately 29 of those water body listings identify the potential source of the impairment as agriculture, and the remaining water body listings identify an unknown source of impairment.*"

The Sacramento River Watershed *2012Water Quality Management Plan Progress Report,* is broken down into sub-watersheds and shows routine exceedance of water quality standards for: dissolved oxygen, pH, pesticides, pathogens, salinity, toxicity and trace metals. Clearly, water bodies accepting discharges from numerous represented irrigated lands are not meeting water quality objectives and existing high quality waters are not being maintained.

Since many of the water bodies in the area have been designated as impaired and sampling shows routine exceedences of water quality standards, the represented agricultural practices have been shown to be not protective of water quality.

2. Samples are collected at 38 Surface Water "Discharge Sites". The region has approximately 1.8 million acres of cropland under irrigation and 12,000 growers with waste discharges from irrigated lands. It is assumed that of the approximately 12,000 farms, discharges of wastewater occur at more than one point on each farm. Sample collection at 38 "representative" surface water locations is not capable of determining if any single discharge is the cause of downstream water quality standard exceedance, stream impairment, or whether agricultural management practices are effective. In order to determine of any single wastewater discharge exceeds water quality standards, it would be necessary to sample that discrete discharge. To determine if any single discharge degrades water quality and causes degradation of the beneficial uses of the receiving stream, if would be necessary to sample both upstream and downstream of the individual point of discharge.

3. Samples are collected at 38 Surface Water "Discharge Sites". The Sacramento River Watershed region has approximately 1.8 million acres of cropland under irrigation and 12,000 growers with waste discharges from irrigated lands surface water courses many of which have been listed as impaired pursuant to Clean Water Act section 303(d). One can only conclude that farm discharges may be many miles upstream from a "representative" sampling location and that interlying farm discharges would cause significant dilution to any pollutants discharged.

4. Sampling and toxicity test reporting for ceriodaphnia dubia, a water flea, shows only one end point, percent survival. This is an acute toxicity end point. Chronic toxicity testing would also include endpoints of growth and reproduction. Intermediate levels of pollutants, below acutely toxic levels, may cause sublethal toxic effects. Failure to analyze samples for sublethal effects precludes determination of compliance with the Basin Plan Water Quality objective for toxicity. It is also not possible to conclude any samples collected were not toxic since sublethal effects were apparently not analyzed.

5. Throughout the proposed WDRs and supporting documents, antidegradation and best practicable treatment and control of wastewater discharges is discussed. The proposed WDR contains no restriction on degradation of surface waters up to the point of meeting water quality standards. It is discussed throughout the mentioned documents that many of the streams in the area have been designated as impaired. The proposed WDR documents that the agricultural discharges routinely exceed water quality standards, which degrade the beneficial uses of the receiving streams. Individual discharges are not regulated under the proposed WDR. The Regional Board apparently has no knowledge of the water quality discharged from individual farms and there is no knowledge of any treatment or control at any individual farm. There is knowledge however that the combined agricultural discharges have and continue to significantly degrade water quality. It would seem impossible to state that best practicable treatment and control of a discharge is being provided when water quality has, and is, significantly degraded and there is no knowledge of what "treatment or control", if any, is being provided at any individual farm. Domestic, commercial and industrial wastewater dischargers are required to adequately treat their wastes to meet water quality standards and meet end of pipe limitations

with strict monitoring of the actual discharge and receiving stream. It cannot possibly be in the interest of the people of California to have to trade the quality of their water for the interests of agriculture.

Conclusion

The region has approximately 1.8 million acres of cropland under irrigation and 12,000 growers with waste discharges from irrigated lands. It is assumed that of the approximately 12,000 farms, discharges of wastewater occur at more than one point on each farm. Sample collection at 38 "representative" surface water locations, far downstream, is not capable of determining if any single discharge is the cause of a downstream water quality standard exceedance, stream impairment, or whether agricultural management practices are effective. It is also not possible to determine if any individual wastewater Discharger is providing best practicable treatment and control of their discharge. In order to determine of any single wastewater discharge exceeds water quality standards, it would be necessary to sample that discrete discharge. To determine if any single discharge degrades water quality and causes degradation of the beneficial uses of the receiving stream, it would also be necessary to sample both upstream and downstream of the individual point of discharge.

Pollutants will generally be diluted or volatize as they flow downstream. If the sampling locations are at extreme downstream locations, which they appear to be, it can reasonably be assumed that the waterways lying above the sampling location are of lower water quality. The lowest water quality would be immediately downstream of the point of discharge of the pollutant in question, which may be many miles upstream of the sampling location. The proposed WDR and the limited downstream sampling locations only allows the Regional Board to conclude that streams and waterways lying above the sampling location are of lower water quality with higher levels of toxicity and more pollutants exceeding water quality standards. The sampling as proposed, and as has been conducted, does not capture the worst case water quality conditions.

**Memorandum**

20 January 2014

**To:** Michael Lozeau
**From:** Bill Jennings

**Subject:** Is Site Specific Monitoring for Growers Within the Sacramento River Watershed That Are Members Of A Third Party Group Reasonable And Affordable?

## Summary

Various water quality experts have commented that representative water quality monitoring at downstream locations cannot identify water quality violations at upstream locations or assess the effectiveness of implemented management measures and therefore is not protective of water quality. The Central Valley Regional Water Quality Control Board (Regional Board) claims that requiring individual discharge monitoring would be unreasonably cost prohibitive for farmers. I reviewed the proposed Waste Discharge Requirements (WDRs), monitoring and reporting program and information sheet, as well as the various reports submitted by the Sacramento Valley Water Quality Coalition to the Regional Board. I also reviewed the Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program from the Irrigated Lands Regulatory Program Environmental Impact Report (EIR). I further examined various reports prepared by county agricultural commissioners regarding the commodity values and the latest Statistical Abstract for California.

The value of agricultural production in the twenty counties comprising the San Sacramento Valley watershed is substantial. Farm net income in California was approximately 32.4% of gross income in the most recent Statistical Abstract (2008). The cost of monitoring/reporting/tracking in the proposed WDRs is $4.90 per acre and represents approximately 4.6% of the total per acre cost of the order. The cost of a comprehensive individual monitoring program to determine compliance with water quality standards, the need for specific management measures or the effectiveness of implemented management measures for the 39% of large farming operations, that comprise 96% of irrigated acreage, would be approximately 24% of the projected cost of implementing management measures.

I could find no analysis or discussion in the economic review of the EIR or the proposed WDRs that supports or justifies a conclusion that requiring individual farmers to monitor their discharge to determine whether or not they are violating water quality standards or whether or not management practices are needed or if implemented management practices are effective would be an unreasonable financial burden.

## Discussion

The Sacramento Valley watershed has approximately 1,777,000 irrigated acres, of which approximately 27,000 acres are regulated under the General Order for Existing Milk Cow Dairies and 556,000 acres are regulated under the Coalition Group Conditional Waiver through the California Rice Commission. WDR, p-4. There are approximately 12,000

growers that will require waste discharges under the proposed Order or other WDRs or conditional waivers. Id. Small farming operations, comprising 61% of growers, account for approximately 4% of the total irrigated lands. Attachment A - Information Sheet, p. 38.

A simple calculation reveals that the 69% of small growers irrigate approximately 34,920 acres, or an average of 9.7 acres each, while the 31% of large growers irrigate approximately 547,080 acres, or an average of 363.1 acres each.

The costs of the proposed Order are estimated to be approximately $187 million or $105.39 per acre annually and this is approximately $8.52 per acre greater than present costs under the conditional waiver. Information Sheet, p. 61. The estimated potential costs per acre are broken down as $1.22 for administration, $2.24 for farm planning, $4.90 for monitoring/reporting/tracking and $97.02 for management practice implementation. Id, pp. 60,61.

The cost breakdown for water quality monitoring is estimated to be $1,890 for one sample per year of basic parameters and detailed chemistry, including collection, analysis and management. Two complete sampling events would cost $3,745 and five per year would cost $9,310. Basic parameter sampling would cost approximately $390 for one event per year or $1,810 for five. Table 2-10, Surface and Groundwater Monitoring Cost Breakdown for Use in All Alternatives, Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program, p-2-19.

The costs of monitoring basic parameters plus detailed chemistry for a single discharge point five times per year for each of the 39% of large farms that average 363.1 acres and comprise 96% of irrigated acres in the coalition would cost $9,310 or $25.64 per acre. As noted above, the estimated costs of the implementation of management practices is estimated to cost $97.02 per acre. In other words, under the proposed WDRs, the potential costs of management practice implementation is more than 3.78 times the cost of monitoring to determine whether or not the management practices are working or even if they are necessary at a particular site.

A fundamental problem of the proposed WDRs is that the monitoring program cannot determine if management measures on a particular farm or for a particular discharge are necessary or if implemented management measures are effective. Such an approach penalizes farmers who are in compliance, not discharging pollutants and who may not need to employ new management practices and rewards those who haven't complied, are violating water quality standards and who have failed to institute effective management practices.

Agriculture in the Sacramento Valley is a major industry. The 27,210 square mile watershed comprises all of Butte, Colusa, Plumas, Sacramento, Sutter, Tehama, Yolo and Yuba Counties and parts of Amador, El Dorado, Glenn, Lake, Lassen, Modoc, Napa, Nevada, Placer, Shasta, Sierra and Solano Counties. According to the annual reports by each County Agricultural Commissioner that must be submitted to the Department of Food and Agriculture in accordance with Section 2279 of the California Food and Agricultural Code,

the value of agricultural commodities produced in 2012 was: Butte ($721,434 million); Colusa ($711,592 million); Plumas ($24,019 million [2011]); Sacramento ($405,211); Sutter ($527,004 million); Tehama ($294,999 million); Yolo ($645,766 million); Yuba ($212,856 million); Amador ($34,584 million); El Dorado ($47,100 million); Glenn ($697,030 million); Lake ($84,842 million); Lassen ($101,633 million); Napa ($665,298 million); Nevada ($16,897 million); Placer ($73,197 million); Shasta ($77,241 million); Sierra ($8,184 million [2011]); and Solano ($342,695 million) Counties respectively. I could not find Modoc County's recent crop reports. All of the counties reported increases of agricultural commodity production, many of them with record levels, with the exception of Yuba, Lassen and Nevada Counties, which reported slight declines from the previous year.

According to the most recently published California Statistical Abstract (2008), Butte, Colusa, Plumas, Sacramento, Sutter, Tehama, Yolo, Yuba, Amador, El Dorado, Glenn, Lake, Lassen, Modoc, Napa, Nevada, Placer, Shasta, Sierra and Solano Counties are the 19th, 20th, 51st, 25th, 24th, 31st, 23rd, 34th, 48th, 47th, 18th, 40th, 42nd, 38th, 21st, 54th, 43rd, 37th, 55th, 27th leading agricultural producers, respectively. Table G-14, California Statistical Abstract 2008, p-130.

The cash farm income in California was $39.094 billion in 2007 and the net farm income that year was $12.665 billion. Id, Table G-9 and Table G-12, pp-122 & 130. Consequently, net farm income was approximately 32.4% of gross income in 2007. Agriculture is not only a major industry but also a highly profitable industry in California.

The Technical Memorandum Concerning the Economic Analysis of the Irrigated Lands Regulatory Program, which was part of the draft Program Environmental Impact Report of the Waste Discharge Regulatory Program for Irrigated Lands within the Central Valley Region is not a comprehensive benefit/cost analysis. The analysis only examines the cost of monitoring, proposed alternatives and various management practices on agriculture. It does not evaluate the financial ability of various farmers to individually monitor their discharges or evaluate implemented management measures. If completely fails to disclose, analyze or discuss the costs of pollution from irrigated agriculture on the environment and society. These include increased water treatment costs; public health and environmental costs, including losses affecting public trust resources like ecosystem services, recreational and commercial fisheries, property values, esthetic enjoyment, etc. Further, ECONorthwest's An Economic Review of the Draft Irrigated Lands Regulatory Program Environmental Impact Report reviewed the Technical Memorandum and found it to be seriously flawed, containing "an incomplete, biased representation of the alternatives' overall costs" and that it "violated generally accepted standards of practice that apply to this type of economic analysis." ECONorthwest Report, p-2, 9.

In reviewing the proposed WDR's, monitoring plans and information sheet; I can find no information or discussion in any of the documents that justifies any conclusion that requiring individual farmers to monitor their discharges and adjacent receiving waters to determine whether or not they are violating water quality standards or whether or not management practices are needed or are effective is an unreasonable financial burden.

Indeed, requiring farmers to monitor and assess their discharges would not only be a giant and necessary step toward protecting water quality, it could also prove to be an economic benefit to many farmers in the long run because monitoring would reveal whether or not additional management practices are even needed for a specific location.